

# Streetcar Update

## Review of February 2019



**Cincinnati Bell® connector**

# Schedule Change Proposal



**Cincinnati Bell® connector**

# Existing Schedule

- Span of Service
  - Sunday/Holiday: 9:00am – 11:00pm
  - Monday-Thursday: 6:30am – midnight
  - Friday: 6:30am – 1:00am
  - Saturday: 8:00am – 1:00am
- Frequency
  - Base Frequency: 15 minutes
  - Peak (Monday – Friday 11am – 7pm): 12 minutes

# Contract 43-14 Transdev Services, Inc.

- Performance contract
  - Fixed detailed scope of work with performance measures
    - Service levels (frequency/span) set in Modification #1
  - Fixed price
  - Minimal specifications
  - *Not* units of service based
  - Budget certainty
- Supplemental service rates
  - Special events

# Request

*“Please provide three cost neutral changes to the streetcar schedule to improve ridership”*

# Methodology

- Ridership analysis
  - Reviewed previous analysis
  - Developed updated average ridership per hour for CY 2018 data
- Recommendations to improve productivity and ridership
  - Based on current conditions, e.g. fare policy
  - Move service hours from low productivity times to higher
- Primary recommendation with two alternatives
  - Schedule and run cut
  - Transdev Collective Bargaining Agreement (CBA)



# Analysis Results

- Lowest ridership is late nights
- Saturday highest demand and loads
- Friday evening high demand after 7:00pm
- Sunday mid-day high demand
- System varies from 10 ppvsh to 90 ppvsh  
(pax per vehicle service hour)

# Primary Recommendation

- Reduce span very late night service all day types
- Extend third vehicle block Friday & Saturday
  - Operate until 10:00pm
- Introduce fourth vehicle block Saturday
  - Operate 1:00pm – 8:30pm
  - Ten minute frequency



# Primary Recommendation Schedule

- Span of Service
  - Sunday/Holiday: 9:30am – 10:00pm
  - Monday-Thursday: 6:30am – 10:30pm
  - Friday: 6:30am – 12:30am
  - Saturday: 8:30am – 12:30am
- Frequency
  - Base Frequency: 15 minutes
  - Peak (Monday – Thursday 11am – 7pm): 12 minutes
  - Peak (Friday 11am – 10pm): 12 minutes
  - Peak (Saturday 1pm – 8:30pm): 10 minutes

### Passengers per Vehicle Service Hour by Hour of the Day

			Mon-Thur				Friday				Saturday				Sunday			
			Average			Average			Average			Average						
			Riders	# of Cars		Riders	# of Cars		Riders	# of Cars		Riders	# of Cars					
			per Hr.	current	proposed	per Hr.	current	proposed	per Hr.	current	proposed	per Hr.	current	proposed				
1:00 AM	to	2:00 AM	-			5.4	2		5.2	2								
12:00 AM	to	1:00 AM	3.1	2		12.6	2	2	19.5	2	2							
11:00 PM	to	12:00 AM	5.7	2		23.2	2	2	42.0	2	3	4.0	2					
10:00 PM	to	11:00 PM	13.5	2	2	37.3	2	3	63.6	2	3	7.7	2	2	2			
9:00 PM	to	10:00 PM	15.2	2	2	44.3	2	3	63.6	2	3	15.1	2	2	2			
8:00 PM	to	9:00 PM	17.4	2	2	44.9	2	3	72.1	2	4	25.3	2	2	2			
7:00 PM	to	8:00 PM	19.3	2	2	50.1	2	3	93.8	2	4	29.4	2	2	2			
6:00 PM	to	7:00 PM	19.8	3	3	44.5	3	3	68.8	3	4	24.0	3	3	3			
5:00 PM	to	6:00 PM	25.1	3	3	40.7	3	3	75.7	3	4	30.3	3	3	3			
4:00 PM	to	5:00 PM	26.2	3	3	41.9	3	3	90.9	3	4	51.9	3	3	3			
3:00 PM	to	4:00 PM	23.7	3	3	44.2	3	3	92.1	3	4	59.6	3	3	3			
2:00 PM	to	3:00 PM	25.2	3	3	46.0	3	3	95.8	3	4	55.6	3	3	3			
1:00 PM	to	2:00 PM	26.8	3	3	45.1	3	3	84.6	3	4	51.6	3	3	3			
12:00 PM	to	1:00 PM	26.6	3	3	47.0	3	3	64.6	3	3	48.8	3	3	3			
11:00 AM	to	12:00 PM	24.5	3	3	38.0	3	3	49.5	3	3	33.0	3	3	3			
10:00 AM	to	11:00 AM	19.6	2	2	29.3	2	2	43.3	2	3	25.1	2	2	2			
9:00 AM	to	10:00 AM	16.4	2	2	20.2	2	2	20.2	2	2	13.6	2	2	2			
8:00 AM	to	9:00 AM	17.4	2	2	17.8	2	2	11.9	2	2							
7:00 AM	to	8:00 AM	11.2	2	2	10.8	2	2										
6:00 AM	to	7:00 AM	11.3	2	2	9.1	2	2										

Key	less than 10 passengers per vehicle service hour
	10 to 20 passengers per vsh
	20 to 30 passengers per vsh
	30 to 50 passengers per vsh
	50 to 70 passengers per vsh
	greater than 70 passengers per vsh

[illegible]

# Key Assumptions

- Transdev Contract
  - Negotiated scope only change order
  - Performance requirements changes
- Fourth vehicle availability
  - **Fleet reliability must improve for four car service**
  - Fleet Management Plan update
- Civil Rights Title VI – not a major change

# Alternative Changes

- End service one hour earlier all day types
- Alternative #2
  - Extend block 3 two hours all day types
  - No fourth block
- Alternative #3
  - Extend block 3 later Monday-Thursday/Friday
  - Start block 3 earlier Saturday/Sunday
  - No fourth block
- Further development on request

# Next Steps

- Transdev Discussions
  - Negotiate contract change order
- City Council and SORTA Board of Trustees Approval
- Update Fleet Management Plan
- Inform FTA

# February 2019 Operations Update

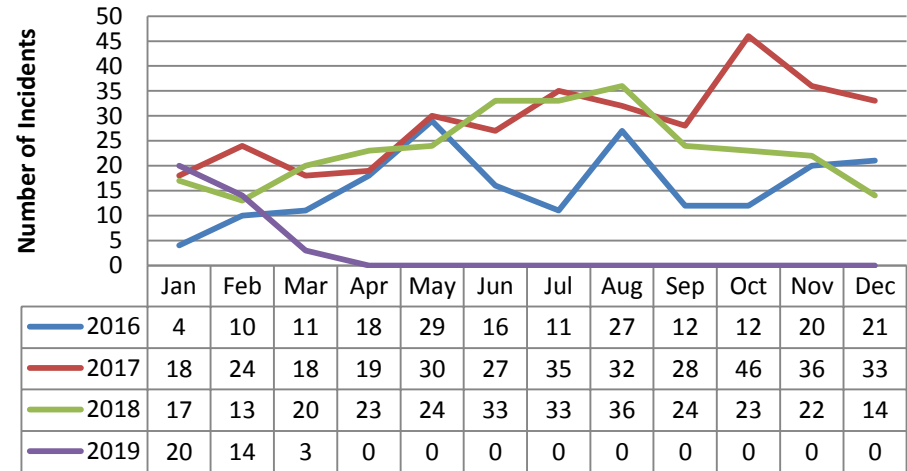


# Safety Metrics: Near Miss

## Near Miss Incident Breakdown

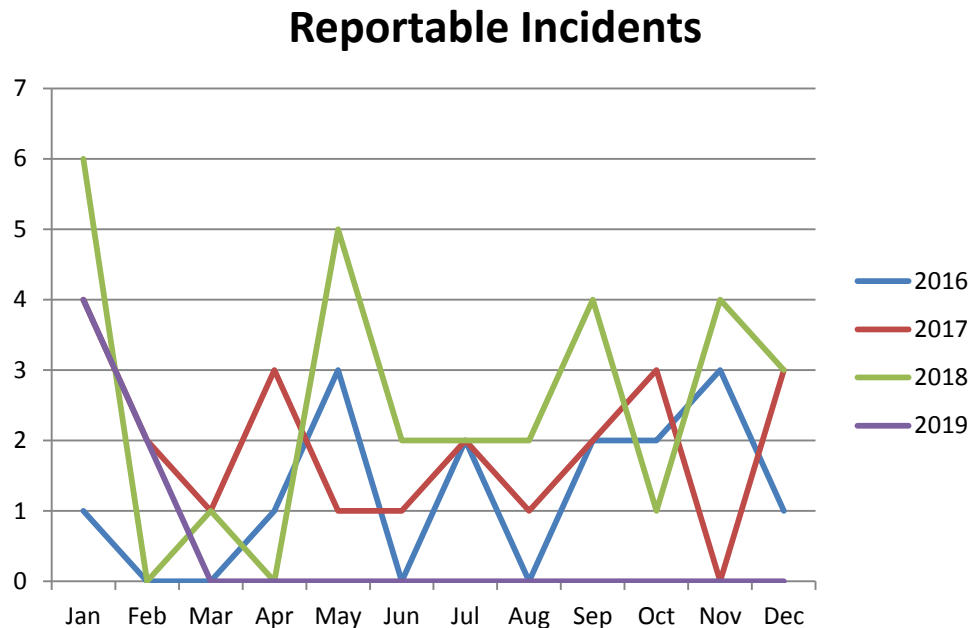
- 13% decrease near-miss events year over year (2018 versus 2019)
  - None at 5<sup>th</sup> and Main in February 2019
- Majority caused by other vehicles attempting to maneuver around streetcar or running red signals
- Tuesday/Friday peak days
- Noon to 17:00 peak times

## Close Call Occurrences by Month



# Safety Metrics: Reportable Incidents

- 2 reportable incidents in February 2019
  - 2 collisions
  - 0 in February 2018
  - YTD 6 reportable incidents; 50% collisions, 33% evacuations
  - 2018 YTD also 6 incidents



# Marketing/Communications

## Facebook

Likes: ▲ 1%

Reach: **19,141**

Engagements: ▲ 2%



## Twitter

Followers: ▲ by 32

Impressions: **155K**

Mentions: **232**

## Instagram

Followers: **1098** ▲ 12

Impressions: **10,724** ▲

# February Ridership Summary

	Ridership	Ridership Budget	Variance
Weekday	15,016	10,962	+4,054
Saturday	6,927	7,699	-772
Sunday	2,765	3,893	-1,128
Holiday	-	-	-
<b>Total</b>	<b>24,708</b>	<b>22,554</b>	<b>+2,154</b>

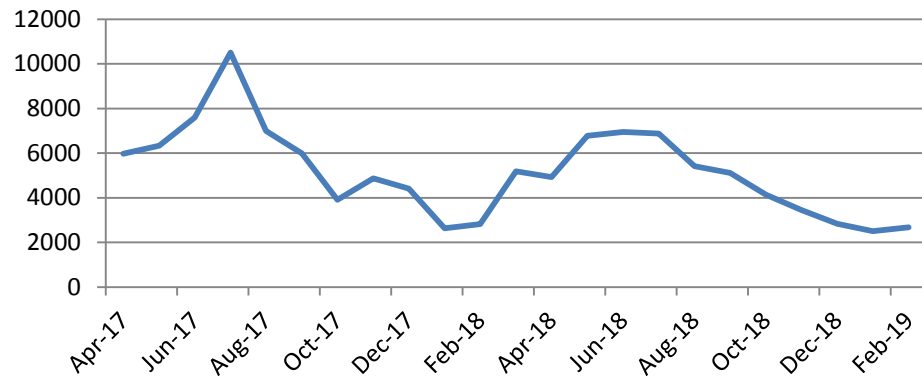
*Notes:*

- 1. February 2018: 22,428 boardings*
- 2. Ridership report appended*

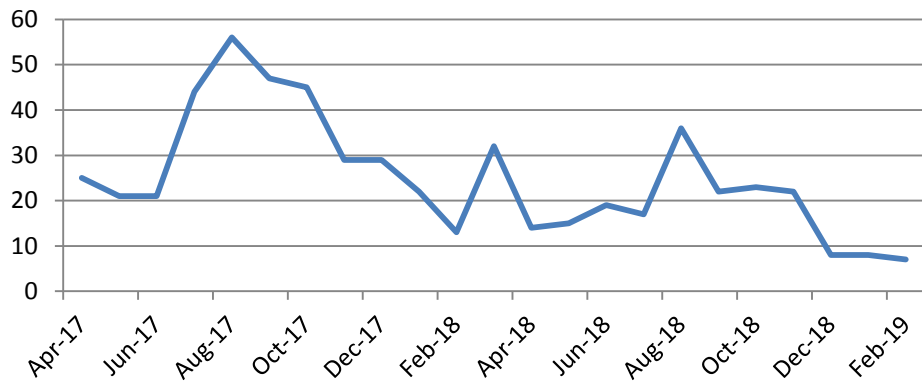
\*Includes any supplemental service

\*Does not include charter service

## Fare Inspections

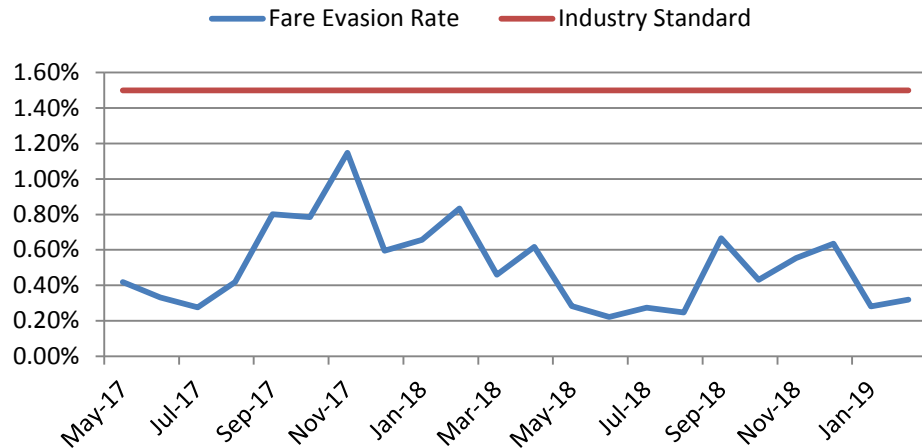


## Citations



# Fare Compliance

## Fare Evasion



# February Operations Summary

Trips Scheduled	Trips Operated	Missed Trips	Average Headway	Blockages	Signal Failures	Close Calls	TAA	Charter
2,116	2,001	115	13:30 (12 min) 15:18 (15 min)	183 (total) 97 (>2 min)	8 (total) 8 (> 2 min)	14	252	0

## Notes:

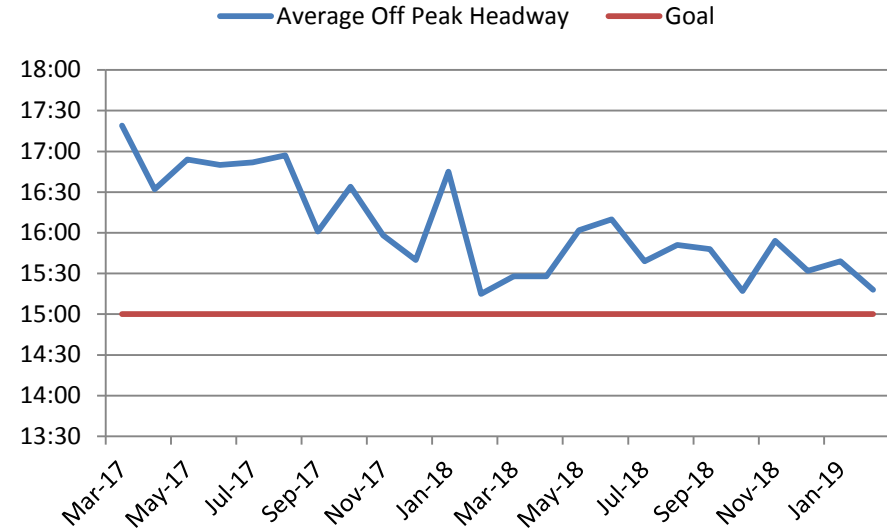
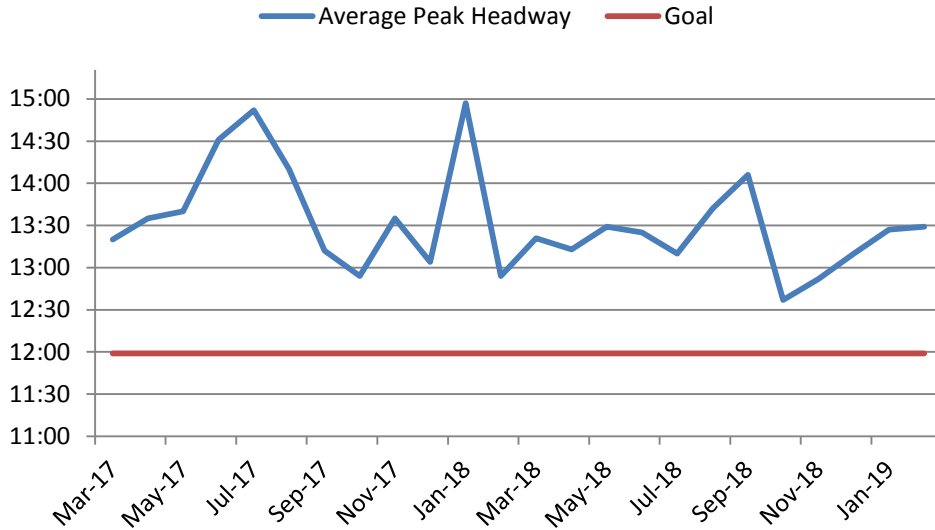
- **Trips Scheduled:** trips that should operate if there are no delays
- **Trips Operated:** actual trips operated
- **Missed Trips:** actual trips not operated
- **Average Headway:** average headway of trips *operated* (12 minutes peak/15 minutes off-peak)
- **Blockages:** blockages that prevent the streetcar from passing resulting in delay (>2 minutes is reporting standard)

## Notes:

- **Signal Failures:** Traffic signal failure resulting in delay
- **Close Calls:** Streetcar operator makes maneuver to avoid impending incident
- **Track Access Authorizations:** daily count of work authorizations in streetcar right-of-way
- **Charters:** Operation of streetcar exclusive to third party



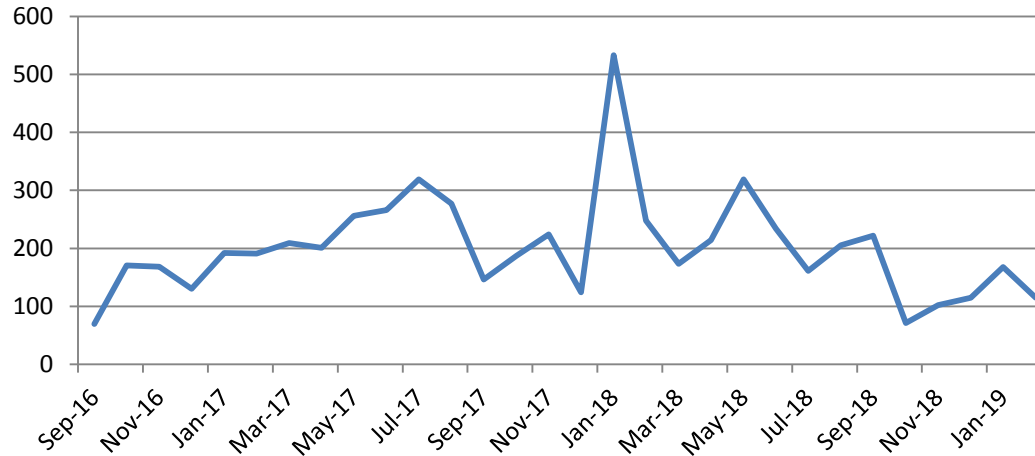
# Operations Trends



**Note: average headway of trips *operated*, missed trips not included**

# Operations Trends

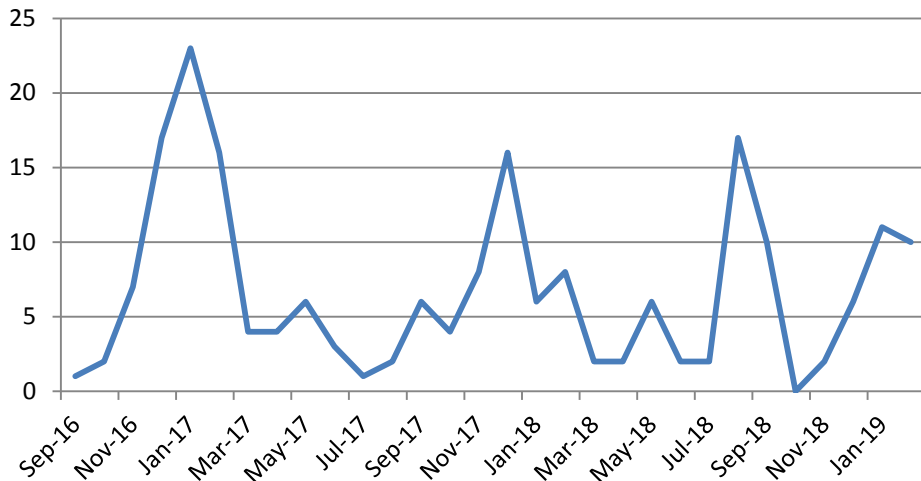
## Missed Trips



**Note: scheduled trips not operated due to delays, blockages, slow speeds or vehicle/operator issues**

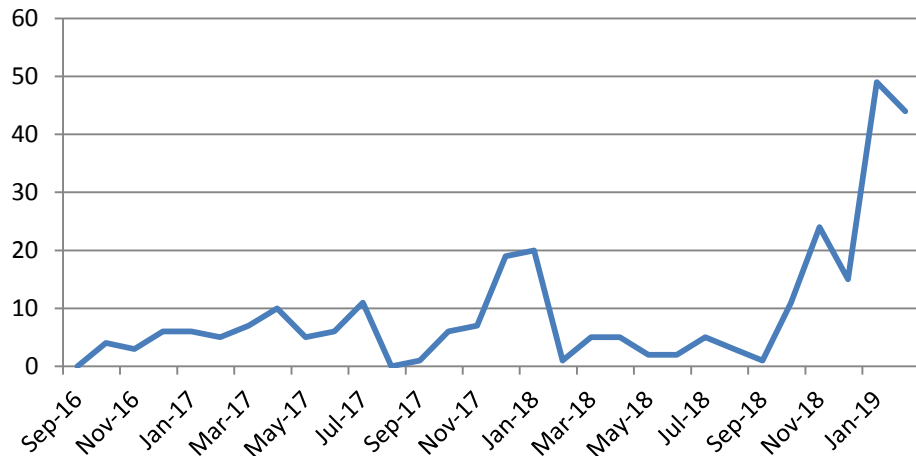
# Operations Trends

## Change Off Road



**Note: Streetcar vehicle failure resulting in removal of vehicle from service— requires off-load of passengers and results in 60+ minutes suspension of service**

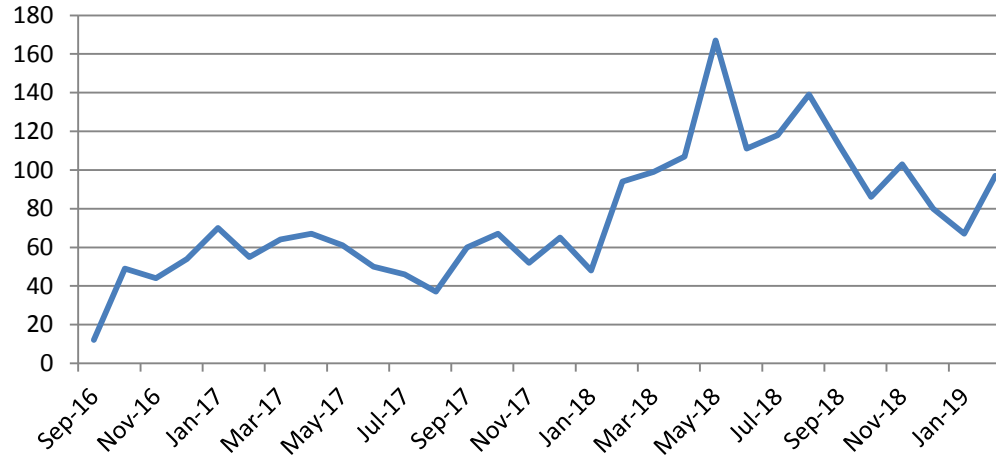
## Train Failure Road



**Note: Streetcar vehicle failure that can be remedied on the line – typically results in 5 to 60 minutes suspension of service**

# Operations Trends

## Streetcar Blockages



**Note: blockages of streetcar system for more than 2 minutes**

# Vehicle Status

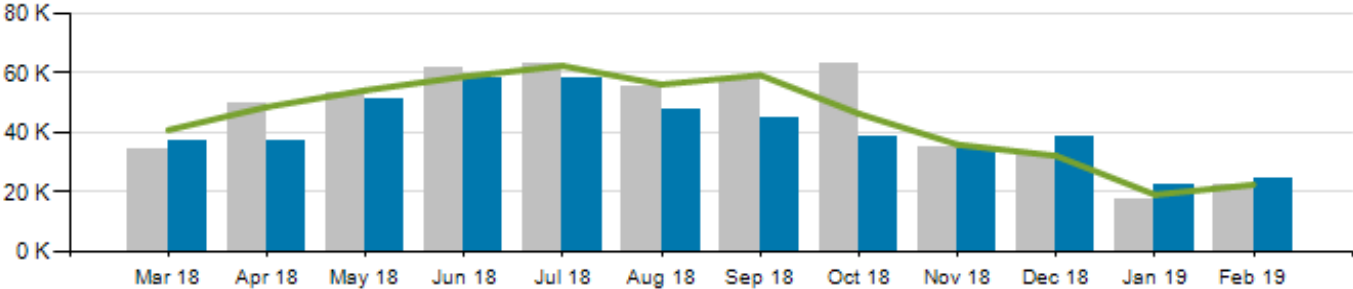
- Camera/Monitor issues ongoing
- 1177 HVAC failure – software update
- Field Modifications (FMIs) ongoing by CAF scheduled until April 2019
  - February 2019 CAF schedule update

**QUESTIONS?**



# CB Connector Ridership

Total Ridership

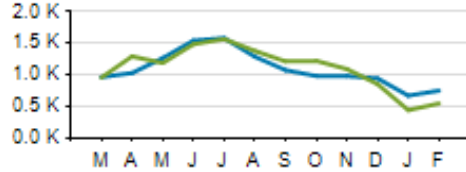


	ACTUAL	BUDGET	VARIANCE (%/#)		FY2018	VARIANCE (%/#)	
TOTAL	24,708	22,554	9.6%	2,154	22,428	10.2%	2,280
FYTD TOTAL	309,707	334,105	-7.3%	-24,398	346,730	-10.7%	-37,023

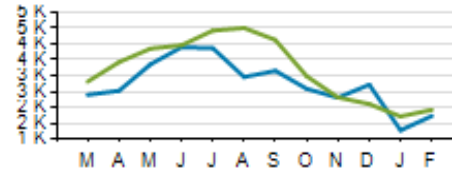
Current Year
  Prior Year
  Budget

# CB Connector KPIs

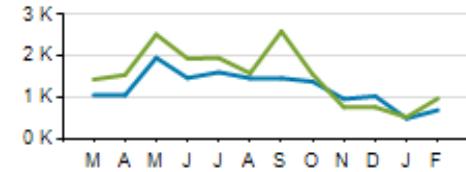
Average Ridership: Weekday



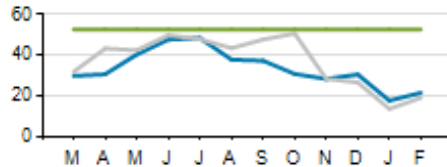
Average Ridership: Saturday



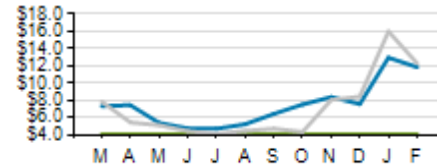
Average Ridership: Sunday



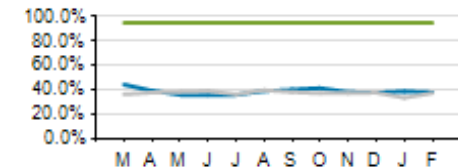
Passengers per Hour



Cost per Passenger



On-Time Performance



	ACTUAL	KPI	VARIANCE
<b>COST PER PASSENGER</b>	<b>\$11.96</b>	<b>\$4.10</b>	<b>+\$7.86</b>
<b>AVERAGE HEADWAY (PEAK/OFF-PEAK)</b>	<b>13:30/15:18</b>	<b>12:00/15:00</b>	<b>+1:30/+0:18</b>
<b>PASSENGERS PER HOUR</b>	<b>21.5</b>	<b>52.8</b>	<b>-31.3</b>
<b>COST RECOVERY</b>	<b>5.1%</b>	<b>14.3%</b>	<b>-9.2%</b>